

Monitoring Data Record

Project Title: R-2210A Site 2 (Waynesville Site 2) COE Action ID: 200130653
 Stream Name: UT Raccoon Creek DWQ Number: 010409
 City, County and other Location Information: Sta. 17 on Bus. 23 S in Waynesville, Haywood Co.
 Date Construction Completed: N/A Monitoring Year: (5) of 5
 Ecoregion: _____ 8 digit HUC unit 06010106
 USGS Quad Name and Coordinates: _____

Rosgen Classification: _____

Length of Project: 900' Urban or Rural: Rural Watershed Size: _____
 Monitoring DATA collected by: M. Green and J. Young Date: 8/13/08

Applicant Information:

Name: NCDOT Roadside Environmental Unit
 Address: 1425 Rock Quarry Rd. Raleigh, NC 27610
 Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us

Consultant Information:

Name: _____
 Address: _____
 Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (1) 2 3

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: NCDOT shall perform the following components of Level I monitoring twice each year for the 5 year monitoring period (summer and winter): Reference photos, plant survival, and visual inspection of channel stability. If less than two bankfull events occur during the first 5 years, NCDOT shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the 5 year monitoring period, the USACE, in consultation with resource agencies, may determine that further monitoring is not required.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Attach site map showing the location and angle of all reference photos with a site designation (name, number, letter, etc.) assigned to each reference photo location. Photos should be provided for all structures and cross section locations, should show both banks and include an upstream and downstream view. Photos taken to document physical stability should be taken in winter. Photos taken to document vegetation should be taken in summer (at representative locations). Attach photos and a description of each reference photo or location. We recommend the use of a photo identification board in each photo to identify location.

Total number of reference photo locations at this site: 3 reference points, 2 photos at each

Dates reference photos have been taken at this site: 5/20/04, 11/1/04, 5/31/05, 3/20/06, 10/18/06, 2/28/07, 9/12/07, 2/12/08, 8/13/08

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: A site map with photo point locations is included with this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

As noted during the last monitoring evaluation, some of the planted vegetation was cut down due to the power company maintaining vegetation underneath the power lines.

Estimated causes, and proposed/required remedial action:

NCDOT does not propose to do anymore replanting at this stream relocation due to the fact that the power lines will be maintained on a routine basis. Some of the black willows have re-sprouted.

ADDITIONAL COMMENTS: Stream is vegetated with alder, dogwood, maple, jewelweed, briars, lespedeza, *Juncus* sp., goldenrod, tear thumb, woolgrass, *Sagittaria* sp., cattail, multi-flora-rose, elderberry, sycamore, black willow, river birch, arrowwood, and thick herbaceous vegetation.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The stream is stabilized for the Year 5 Summer Evaluation. NCDOT will continue to monitor this stream.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

Waynesville Site 2



Photo 1 (Upstream)



Photo 2 (Downstream)



Photo 3 (Upstream)



Photo 4 (Downstream)



Photo 5 (Upstream)



Photo 6 (Downstream)

Year 5 Summer – August 2008

The map is a technical drawing of a landscape, likely a river valley or creek bed. It features several key elements:

- Topographic Features:** Contour lines and elevation markers are present throughout the map, indicating the terrain's shape and height. Specific elevations like 4400, 4300, 4200, 4100, 4000, 3900, 3800, 3700, 3600, 3500, 3400, 3300, 3200, 3100, 3000, 2900, 2800, 2700, 2600, 2500, 2400, 2300, 2200, 2100, 2000, 1900, 1800, 1700, 1600, 1500, 1400, 1300, 1200, 1100, 1000, 900, 800, 700, 600, 500, 400, 300, 200, 100, 0 are marked.
- Roads and Infrastructure:** A network of roads is shown, including a main road labeled 'R-2210A' and several smaller roads. A 'MATCHLINE SEE SHEET 7' is indicated on the right side.
- Photo Points:** Several points are marked with circles and labeled: 'Photos 18.2', 'Photos 3&4', and 'Photos 5&6'. These points are located along the creek bed and near the roads.
- Legend:** A legend box in the bottom left corner is titled 'Photo Points' and contains a circle with a dot symbol.
- Inset Map:** A small inset map in the bottom right corner shows the location of the main map area within a larger regional context, with labels for 'R-2210A', 'UT to Racoon Creek', and 'Photo Point Location'.